Specifications

Motor—See pages 2, 5 and 8.

Carburetor—Schebler.

Three Speed Transmission—Harley-Davidson, see pages 3 and 8.

Lubrication—Harley-Davidson automatic, see page 2.

Step Starter—Harley-Davidson, see page 3.

Clutch—Harley-Davidson multiple dry disc in V type machines; multiple disc running in oil in Sport Models.

Handlebars—Harley-Davidson one piece welded, one inch tubular steel, double stem.

Controls—Grip, double-acting wire control entirely enclosed within the handlebars.

Frame—Harley-Davidson extra heavy gauge high carbon steel seamless tubular loop, rigidly reinforced on V type machines; keystone frame on Sport Models.

Driving Chains—Duckworth roller, 3/8 inch width and 5/8 inch pitch.

Brakes—Harley-Davidson, see page 4.

Saddle—Mesinger.

Tires—Standard make 28″ x 3″ on V type machines; 26″ x 3″ on Sport Models.

Wheelbase—59½ inches on V type machines, 53½ inches on Sport Models.

Tanks—Gasoline capacity, 3¼ gallons, lubricating oil, 1 gallon on V type machines; 2¾ gallons gasoline and 2 quarts lubricating oil capacity on Sport Models.

Mudguards—Harley-Davidson pressed steel, extra wide and substantial.

Tool Equipment—Complete tool kit.

Finish—Harley-Davidson brewster green, tastily double striped in gold.

Harley-Davidson
Motorcycles and
Sidecars ------

Harley-Davidson, the Universal Favorite

THE Harley-Davidson enjoys a dominating position in the motorcycle field. Universally, it is the favorite.

The steadily increasing popularity which it manifests can only be attributed to the superior design, the high standards of Harley-Davidson workmanship and construction, the machine's unparalleled service to its rider and its consistency in proving victorious in events of national and international scope.

More Harley-Davidson motorcycles and sidecars are produced and sold each year than any other make in the world—another evidence of Harley-Davidson universal supremacy.

The progress of the Harley-Davidson Motor Company has been astounding. From a crude little workshop, 10′ x 15′, in 1904 to the largest motorcycle plant in the world during a period of only seventeen years, is the story of its rapid and phenomenal growth. This success is due in large measure to the fact that Harley-Davidson is never at a standstill. Its engineers are constantly trying to further Harley-Davidson perfection, if this is possible.

Only the best obtainable materials are incorporated in the Harley-Davidson and the most skilled mechanics employed in its construction.

Thirty-eight separate and distinct types of highest-grade metals are used. These metals have proved their worth under the critical examination and severe tests to which Harley-Davidson engineers put them, and have been sanctioned as the most suitable to be embodied in the "World's Champion Motorcycle." And to-day, these self same materials are purchased by expert metallurgists who insist that the quality must not vary. This fact emphasizes the built-in value of Harley-Davidson motorcycles. The design and close manufacturing standards employed stand out pre-eminently, the most minute care being given to each part while in the process of construction and assembly.

Finally, the finished machine undergoes a rigid test under the supervision of expert mechanics whose special training fits them to detect any possible imperfections.

This combination, together with a plant equipped with the finest, most modern manufacturing machinery, assures the purchaser of a Harley-Davidson motorcycle that he is getting the acme of quality and refinement—the best that money can buy.

HARLEY-DAVIDSON—THE UNIVERSAL FAVORITE

It is a well-known fact that the heart of the motorcycle is its motor. Like the heart of the human being, it gives the machine life—that power to perform.

Realizing the absolute importance of a thoroughly efficient motor, Harley-Davidson engineers designed and perfected a motor and motorcycle as nearly mechanically perfect as it is possible for man to build. That they were successful in accomplishing their aims is proved by the universal acceptance of the Harley Davidson, as the motorcycle supreme.

Model 22FS, with Complete Equipment

The Powerful Harley-Davidson Motor

The salient feature of the Harley-Davidson is its marvelous motor. Its perfect performance and staying qualities have distinguished it as the typical motorcycle motor.

The efficient power unit of the "V" type twin

The high-powered twin cylinder Harley-Davidson motor which is the power unit of models 22J, 22JD, 22F and 22FD is of Harley-Davidson design and manufacture throughout. It is a direct air-cooled, high-speed, high-efficiency, two cylinder, four cycle, "L" head, pocket valve, "V" type motor. The standard 22J and 22F models have a bore of 84.1 millimeters (3-5/16″) and a stroke of 88.9 millimeters (3-1/2″), the piston displacement being 988.83 cubic centimeters (60.34 cubic inches), and develop more than 16 horsepower.

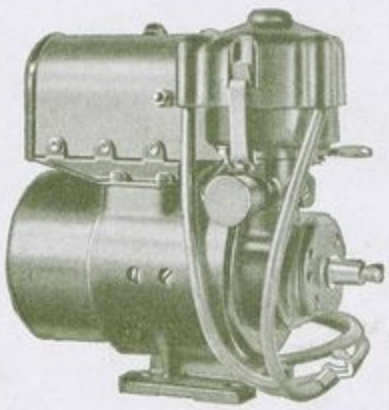
Simplicity and scientific construction, insuring longer life, smoothness and quietness of operation, enable the Harley-Davidson to stand up and come through under the most trying conditions.

The Harley-Davidson is exceptionally economical. A solo machine will average from 40 to 60 miles per gallon of gasoline, and when driven with sidecar and passenger, it will average almost as much.

One of the prime essentials of proper motor performance is correct lubrication. The patented Harley-Davidson automatic oil pump feeds the motor the exact amount of oil needed,

eliminating the dangers of under-lubrication and avoiding the accumulation of carbon due to over-lubrication. This system prolongs motor life, sustains speed and power and makes for great economy. 800 to 1000 miles on a gallon of Harley-Davidson cylinder oil is a fair average mileage.

All in all, it is a truly marvelous motor in an exceptionally reliable motorcycle.



The generator of Harley-Davidson design and manufacture throughout

The Harley-Davidson Three-Speed Transmission

The Harley-Davidson sliding gear transmission is silent in operation. It is impossible to tell whether high gear, low gear, or intermediate is being used. The transmission is made right—of correct design, and embodies the highest grade of workmanship throughout.

The gears are of chrome nickel steel, accurately cut and finished. The transmission box is made of aluminum.

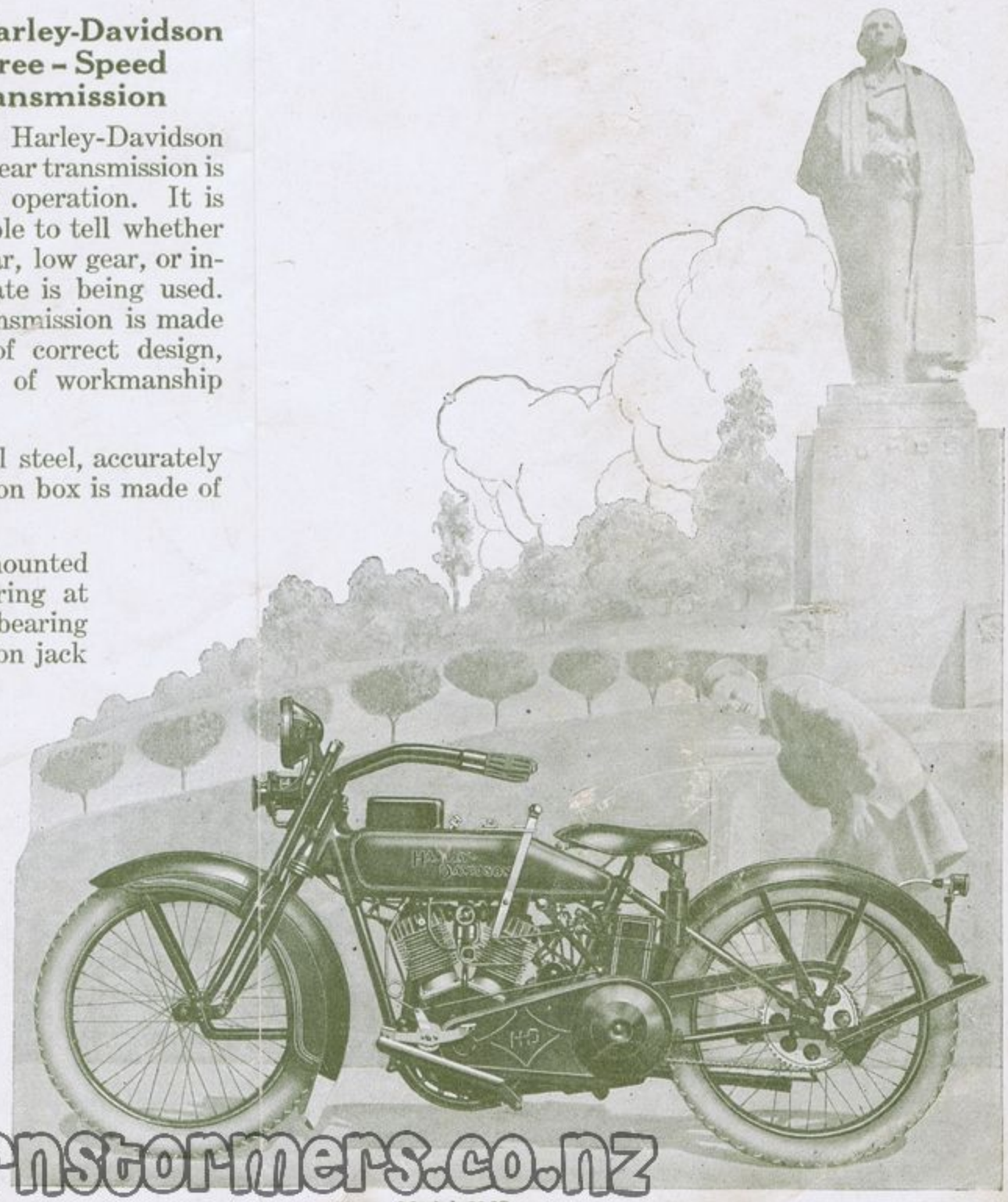
The transmission main shaft is mounted on a large, high duty roller bearing at the left or drive side and a ball bearing on the right side. The transmission jack shaft is carried on two large Harley-Davidson roller bearings. The main drive gear runs on a high-duty phosphor bronze bearing.

The bearings in the Harley-Davidson transmission are so arranged that they receive ample lubrication. The same grade of oil is used in the transmission as is used in the motor.

The Harley-Davidson transmission is as efficient and trouble-proof as can be made.

The Harley-Davidson Starter

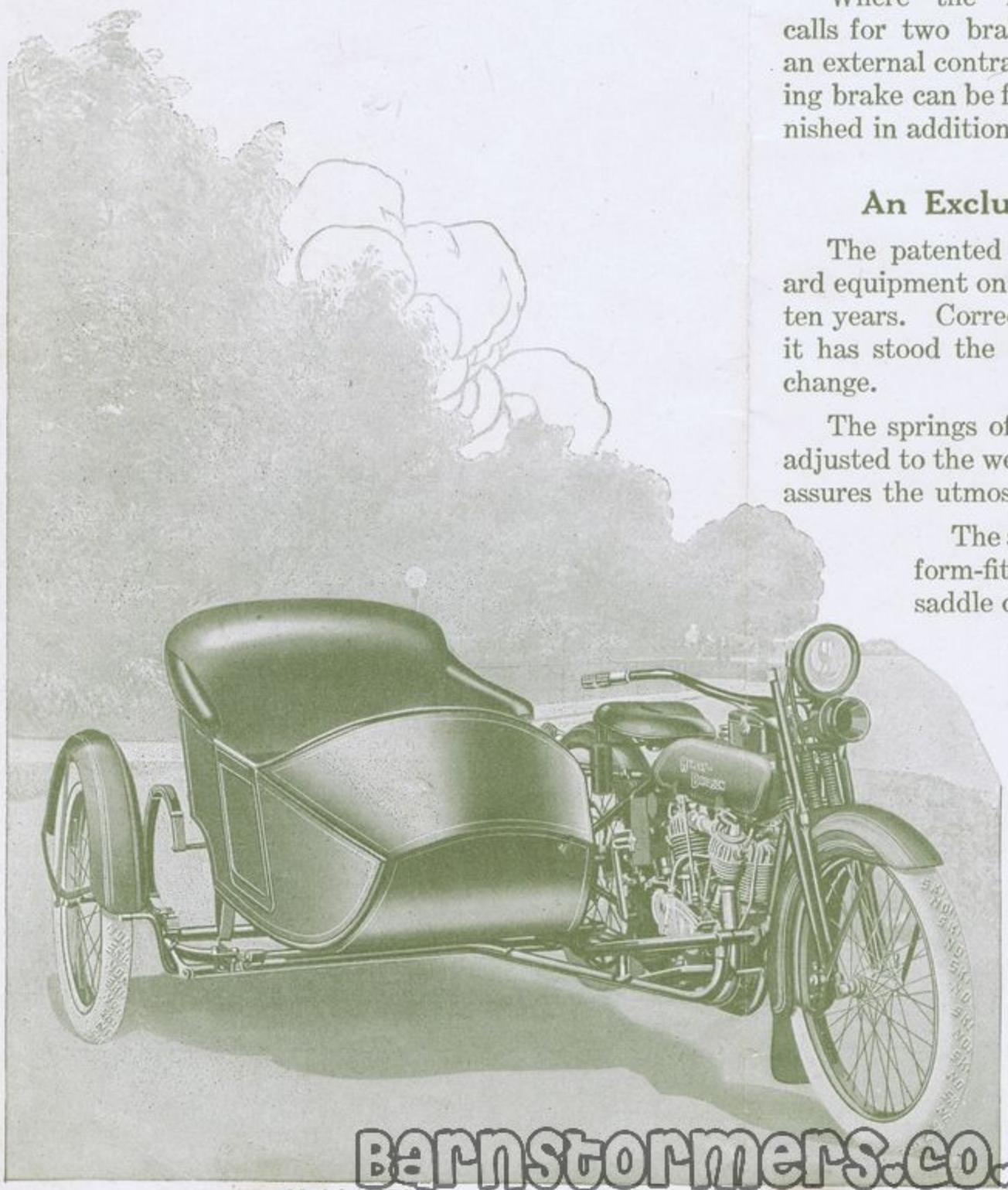
The Harley-Davidson rear stroke mechanical starter has proved by more than six years of service in the hands of many thousands of owners that it answers all the requirements of the most exacting riders. It is put into action with a backward and downward stroke. Upon completion of the starting stroke, a spring returns the pedal to its original posi-



Model 22JS

tion. The pedal folds up out of the way when not in use.

The Harley-Davidson starter is sturdily built, and of extremely simple construction. There is nothing to get out of adjustment and no small parts to break. All working parts are enclosed and the starter is in no way affected by rain, snow, sleet, mud or sand.

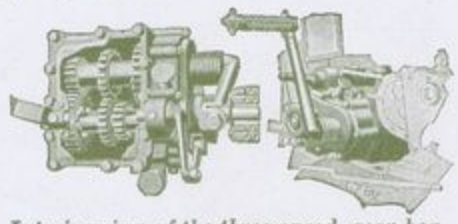


Model 22JDS —Sidecar 22QL

The Powerful Brake

The brake is controlled by a foot lever on the right footboard. It is a large, internal expanding, double acting, band brake, operating on a steel drum 7-5/16″ in diameter with a 1″ face. No inside adjustment is required and the motorcycle will have seen considerable service before it becomes necessary to adjust the brake rod proper.

Where the law calls for two brakes an external contracting brake can be furnished in addition.



Interior view of the three-speed gear box Harley-Davidson rear stroke step starter

An Exclusive Comfort Feature

The patented Ful-Floteing seat has been standard equipment on Harley-Davidson motorcycles for ten years. Correct in principle when first adopted, it has stood the test of time without the need of change.

The springs of the Ful-Floteing seat post can be adjusted to the weight of the individual rider. This assures the utmost degree of riding comfort.

The air cushion saddle is a large, roomy, form-fitting, padded saddle—a creation in saddle construction which is meeting with the approval of all riders, especially long distance tourists.

The Beautiful Finish

The most impressive feature of the 1922 Harley-Davidson motorcycles and sidecars is the new finish. It is a rich, brewster green, tastily striped in gold which lends greatly to Harley-Davidson distinctiveness.

HARLEY-DAVIDSON—THE UNIVERSAL FAVORITE

Each enameled part receives three coats of enamel and one of varnish and is oven baked after each coat, giving a lasting, beautiful lustre.

The 74″ Superpowered Twin

The Harley-Davidson 74″ Superpowered Twin Cylinder Motorcycle is a specially developed machine possessing tremendous power, superpower, which enables it to conquer rough roads, sand and mud and the steepest hills with ease.

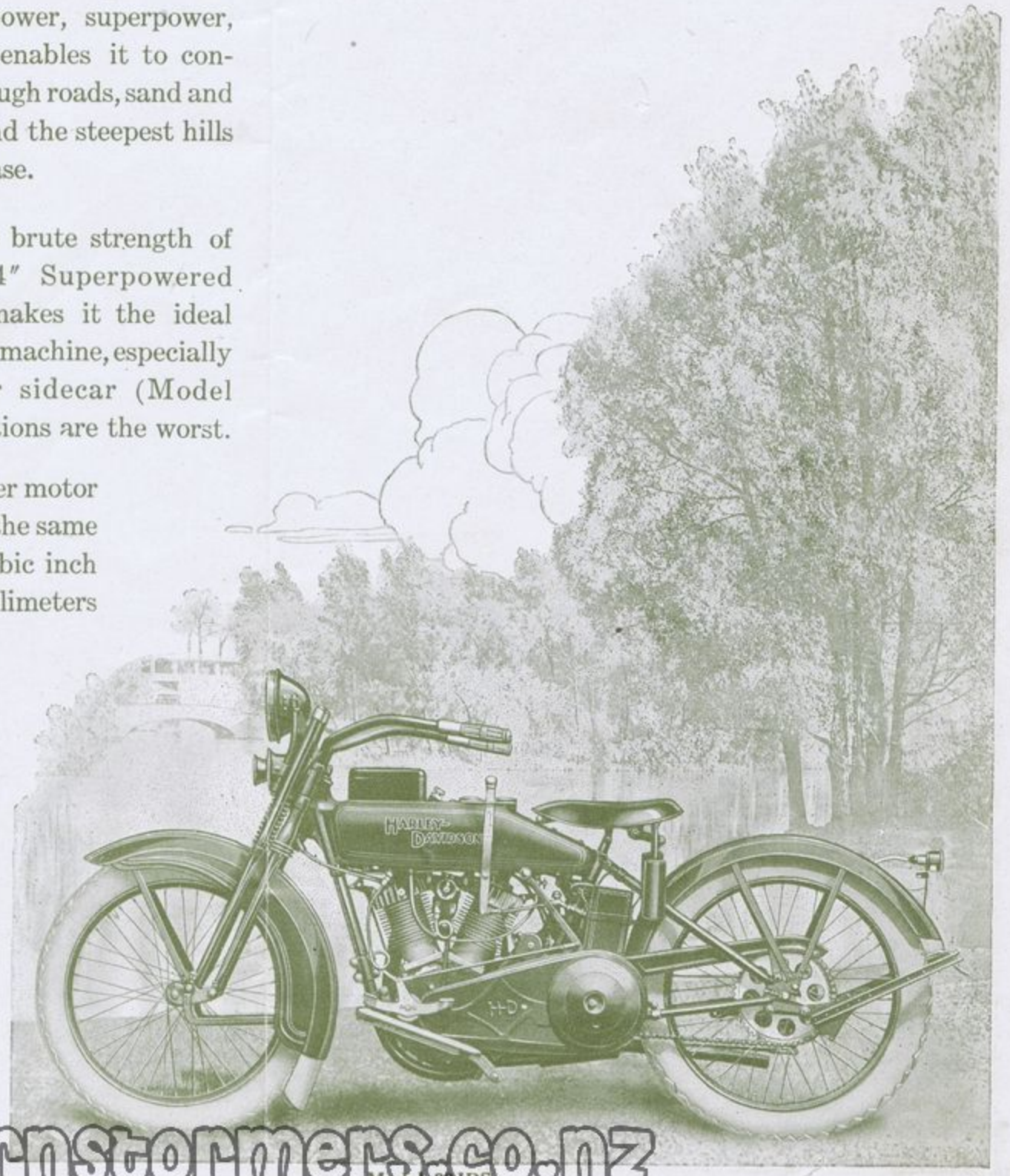
The maximum comfort affording Ful-Floteing seat post and air cushion saddle

The brute strength of the 74″ Superpowered Twin makes it the ideal sidecar machine, especially for use with the two-passenger sidecar (Model 22QL) and where traveling conditions are the worst.

The high-powered twin cylinder motor of models 22JDS and 22FDS is of the same general construction as the 61 cubic inch motor but has a bore of 86.97 millimeters (3-7/16″) and a stroke of 101.60 millimeters (4″),the piston displacement being 1207.956 cubic centimeters (74 cubic inches) and develops more than 18 horse-power.

The Harley - Davidson double spring fork, which is regular equipment on the 74″ Superpowered Models eliminates shocks, absorbs jolts and affords riders maximum comfort.

The Harley-Davidson 74″ Superpowered Twin possesses colossal strength and power, together with motorcycle ultra-refinement.



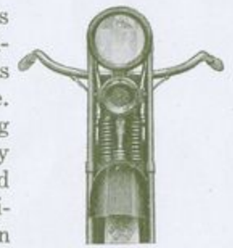
Model 22JDS

The Luxurious Harley-Davidson Sidecar

A masterpiece of beauty and refinement, Harley-Davidson sidecars are the most popular in the world. Scientifically designed and constructed with roomy body, unusually deep, heavy upholstering of the seat cushion and back, well padded arm rests and resilient four-leaf elliptic springs to afford a maximum amount of comfort, Harley-Davidson sidecars skim over the roads with unparalleled smoothness. They are offered in three superb models — 22LR, 22L, 22QL — each model a distinctive type of exceptional beauty and sturdiness.

The Harley-Davidson chassis is without an equal. It is strongly reinforced, is constructed of heavy gauge 1-1/4" high carbon steel tubing and stands up under the hardest usage.

Ball and socket fittings of drop forged steel connect the sidecar chassis to the motorcycle frame. The upper connecting brace is of special alloy steel, spring tempered and curved, making a semi-rigid connection between the sidecar chassis and the motorcycle frame.



The shock reducing, comfort giving, double spring fork of models 22FD and 22JD

"Roadster" Sidecar 22LR, shown here, features a snappy looking, speedster type, single passenger body with long, low graceful lines of distinctive appearance. The sweeping, curved back combines beauty with utility, for below the rumble deck a roomy locker has been incorporated. This storage compartment is absolutely waterproof, can be locked and is accessible by moving the back cushion forward.

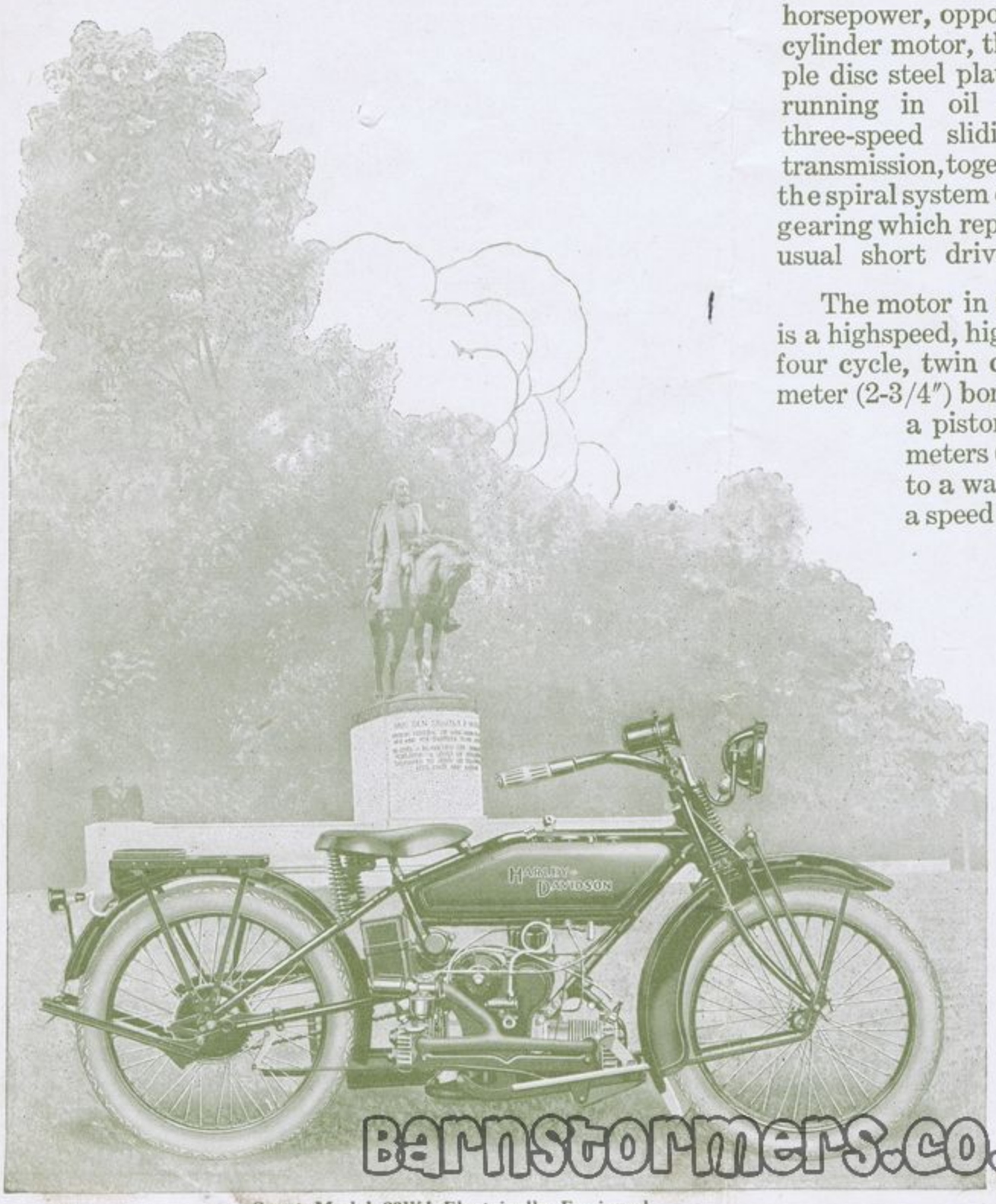
Large, roomy, waterproof storage compartment

Model 22JDS —"Roadster" Sidecar 22LR

HARLEY-DAVIDSON—THE UNIVERSAL FAVORITE

The Harley-Davidson Sport Model

The Sport Model is another Harley-Davidson creation in its entirety, representing unmatched worth. Lighter than the big twin, yet proportionately as staunch, powerful and reliable, it functions with unusual smoothness on rough roads and conquers hills with remarkable ease. Sand and mud hold no terrors for the rider.

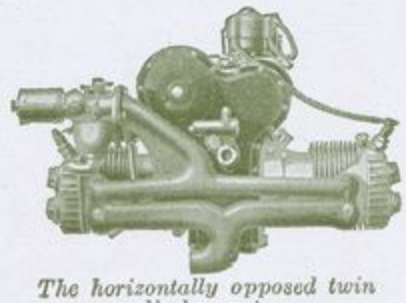


Sport Model 22WJ, Electrically Equipped

The low center of gravity, and the low, well forward saddle position assure comfort and ease of handling at all times. It is truly the ideal solo mount.

The Sport Model Motor

The most outstanding feature of the Harley-Davidson Sport Model is the single unit power plant which combines the six horsepower, opposed twin cylinder motor, the multiple disc steel plate clutch running in oil and the three-speed sliding gear transmission, together with the spiral system of undergearing which replaces the usual short drive chain.



The horizontally opposed twin cylinder motor

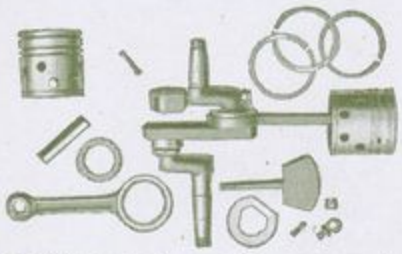
The motor in the Harley-Davidson Sport Model is a highspeed, high-efficiency, horizontally opposed, four cycle, twin cylinder motor with a 69.84 millimeter (2-3/4″) bore, 76.20 millimeter (3″) stroke and a piston displacement of 584 cubic centimeters (35.64 cu. in.) It will throttle down to a walking pace or readily accelerate to a speed of over 50 miles an hour.

In all other respects, the Sport Model embodies the same sterling qualities of the big twin. It has the patented Harley-Davidson automatic oil pump which lengthens the life of the motor and makes for economy—the efficient generator of Harley-Davidson design and manufacture—the noiseless three-speed transmission—the convenient and reliable step starter — the double acting brake—the Ful-Floteing seat which assures comfort, always—the beautiful brewster green finish and a host of other noteworthy features.

Proved Worth By Actual Performance

Put to the test by thousands of enthusiastic riders, and in cross-country and endurance runs and hill climbs, the Sport Model has proved that it leads the middleweight motorcycle field. This leadership is the result of Harley-Davidson ingenuity and high ideals of motorcycle design and construction.

The Harley-Davidson Lighting and Ignition System



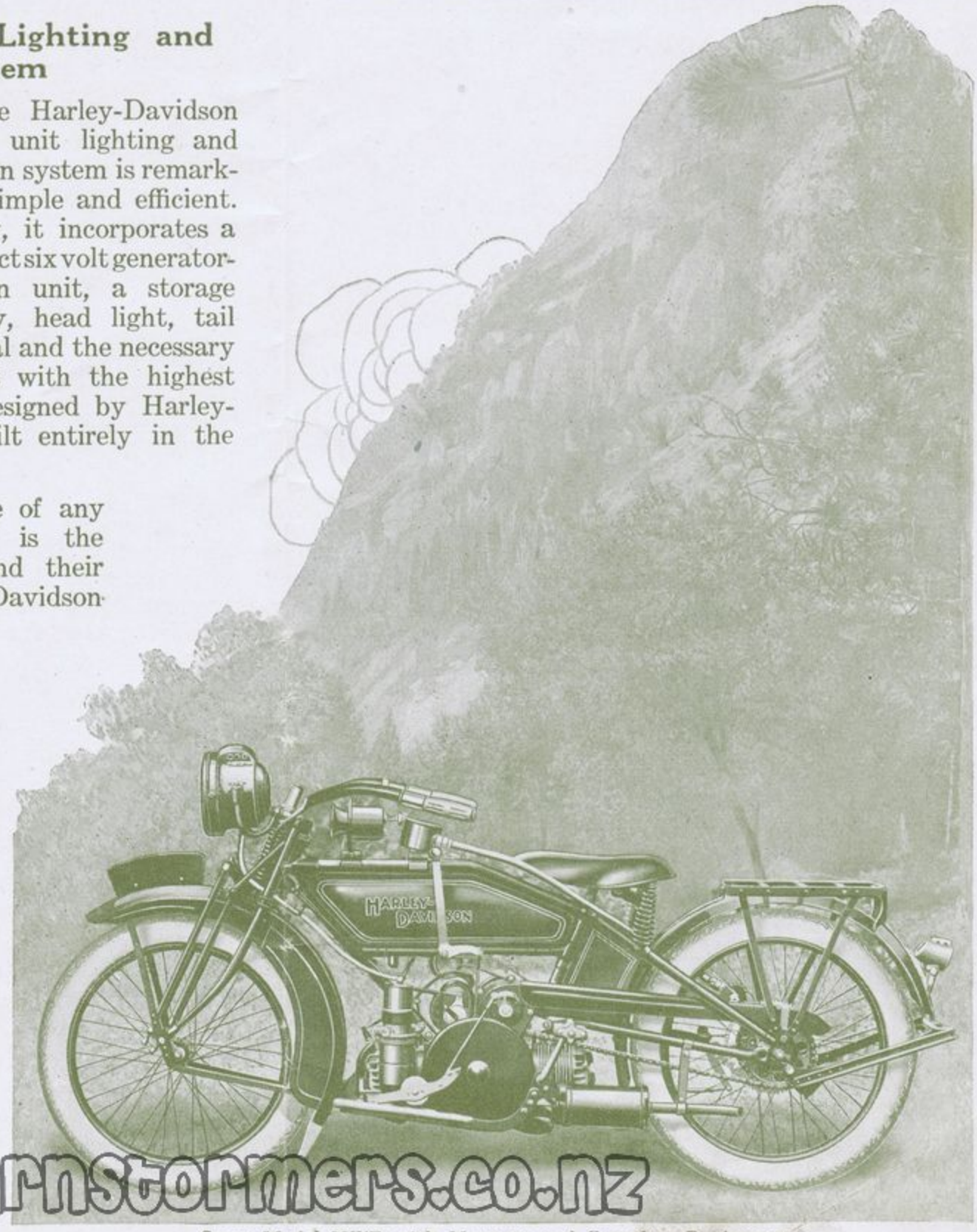
Excellent workmanship apparent on all parts

The Harley-Davidson single unit lighting and ignition system is remarkably simple and efficient. Briefly, it incorporates a compact six volt generator-ignition unit, a storage battery, head light, tail light, motor driven warning signal and the necessary switches and wiring. To meet with the highest standards, the generator was designed by Harley-Davidson engineers, and is built entirely in the Harley-Davidson factories.

The most important feature of any lighting and ignition system, is the location of the instruments and their method of drive. The Harley-Davidson generator-ignition unit is mounted on a substantial base directly back of the motor, and driven by the enclosed timing gears. In this way, the generator is protected from harm and no annoyance can be caused by makeshift driving methods.

Regulation of the current output of the generator is provided by the well-known space third-brush method. This is an inherent control, governing both the voltage and current output of the generator. The generator starts to charge at a low driving speed, and delivers its full charging current at average driving speed. Above average speeds, the third brush regulation reduces the current automatically, so that the battery is not subjected to an excessive charge rate, if the machine is driven at high rates of speed.

The ignition system consists of a circuit breaker or timer, a distributor and a high tension spark coil, transforming the primary current of six volts into one

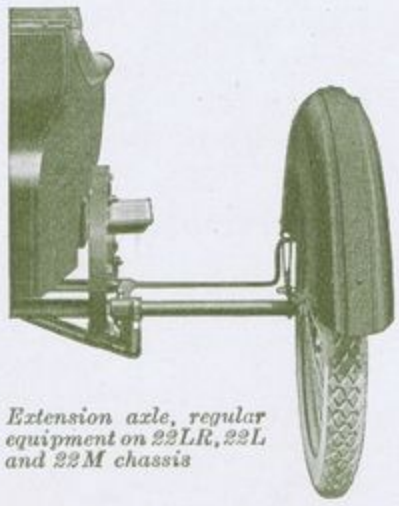


Sport Model 22WF, with Magneto and Complete Equipment

of sufficient voltage to jump between the points of the spark plugs. The condenser is contained in the spark coil, and the armored construction of the coil case makes the assembly absolutely waterproof.

The generator-ignition unit and the storage battery are connected through an automatic centrifugal cut-out switch. This switch is simple in construction and positive in its action. When the motor starter is put into action, the switch automatically connects the ignition circuit, with the storage battery, providing a current for the spark coil and making the motor very easy to start. When the motor stops, the switch automatically opens the circuit and prevents the storage battery from discharging through the generator windings.

The six volt storage battery furnishes current for ignition when starting the motor, and also for the dimmer and tail bulbs when the machine is standing. The generator and battery combination forms a perfectly balanced electrical system that will give unparalleled service.



Extension axle, regular equipment on 22LR, 22L and 22M chassis

The Economical Harley-Davidson Parcelcars

Quick, efficient delivery at minimum cost is vital to many businesses. Harley-Davidson parcelcars render service that generates good will, increases sales, widens the selling territory and radically reduces delivery costs.

Two Chassis

Harley-Davidson parcelcar chassis are manufactured in two sizes, 300 and 400 pounds capacity. No body is supplied for the 400 pound chassis from the factory. Most parcelcar purchasers have bodies made locally to meet their individual requirements.

The M body is strongly built of well seasoned lumber, tenoned together and fastened with screws and reinforced with angle irons. Steel reinforcements carry the weight of the body at rear spring support rod. Top is hinged so that it may be opened from the driver's seat. Body is 36-3/4″ long, 21-3/4″ wide, 18″ high in the center and 16-5/8″ at the side and is finished in attractive brewster green with gold striping. When specified on the original order, the body may be lettered at the factory at small cost. This body is interchangeable with the single passenger sidecar body.

Model 22FS —Parcelcar 22M

1922 MODELS

Harley-Davidson Motorcycles

61 cubic inch motors conservatively rated 7/9 h. p.
74 cubic inch motors conservatively rated 10 h. p.
Sport model motors conservatively rated 4 h. p.

Model 22-JS— Code Word "Model 10" Electrically equipped 61 cu. in. motor . _____

Model 22-FS— Code Word "Model 20" Magneto equipped 61 cu. in. motor . . _____

Model 22-WJ— Code Word "Model 6" Sport model, electrically equipped . _____

Model 22-WF— Code Word "Model 5" Sport model, magneto equipped . . _____

Model 22-JDS— Code Word "Model 16" Electrically equipped 74 cu. in. motor . _____

Model 22-FDS— Code Word "Model 15" Magneto equipped 74 cu. in. motor . _____

Extra Equipment for Harley-Davidson Motorcycles

(Add to the above price)

Extra Heel Brake for V Type Machines . . . . . _____

Hand Brake for Sport Models . . _____

Front Stand for V Type Machines _____

Luggage Carrier for V Type Machines . . . . . _____

Speedometer for All Models . . _____

Lamp and Generator for All Magneto Equipped Models . . . _____

Hand Horn for All Magneto Equipped Models . . . . _____

Harley-Davidson Sidecars and Parcelcars

Model 22-LR— Code Word "Model 30" "Roadster" Sidecar (left hand) . . _____

Model 22-LR— Code Word "Model 35" "Roadster" Sidecar (right hand) . . _____

Model 22-L— Code Word "Model 40" "Tourist" Sidecar (left hand) . . _____

Model 22-L— Code Word "Model 50" "Tourist" Sidecar (right hand) . . _____

Model 22-QL— Code Word "Model 95" Two Passenger Sidecar (right hand) . _____

Model 22-M— Code Word "Model 60" Parcelcar (left hand) . . . . _____

Model 22-M— Code Word "Model 70" Parcelcar (right hand) . . . . _____

Model 22— Code Word "Model 80" Chassis Only, Single Passenger (left hand) . . . . _____

Model 22— Code Word "Model 90" Chassis Only, Single Passenger (right hand) . . . . _____

Model 22— Code Word "Model 100" Chassis Only, Two Passenger (right hand) . . . . _____

Extra Equipment for Harley-Davidson Sidecars

(Add to the above price)

Complete Sidecar Hood, including glass front windshield and side curtains for Model L . . . _____

Complete Sidecar Hood, including glass front windshield and side curtains for Model QL . . . _____

Sidecar Apron for Model L . . . _____

Sidecar Apron for Model QL . . _____

Sidecar Lamp and Wiring for all electrically equipped combinations . . . . . _____

HARLEY-DAVIDSON MOTOR COMPANY, MILWAUKEE, WIS., U. S. A.

Cable Address "Hardaymoco, Milwaukee"